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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/545,592	04/07/2000	Richard Henry Mandel III	ST9-99-179	9939

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EXAMINER
PHAM, HUNG Q

ART UNIT	PAPER NUMBER
2172	17

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *22 January 2004*.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-33* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-5,8-16,19-27 and 30-33* is/are rejected.

7) ☒ Claim(s) *6,7,17,18,28 and 29* is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments on pages 8-10, filed 01/22/2004, with respect to Written Description Rejection have been fully considered but they are not persuasive.

As in the Office Action, paper No. 15, the step of *modifying the query to replace one or more selected clauses with a false clause* of claims 1, 6, 12, 17, 23 and 28 was rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

As argued by applicant on pages 8-10, this step is "fully described in at least page 10, line 26 through page 11, line 15 of the Specification" (Amendment, page 9, lines 11-13).

In fact, as described in page 11, lines 7-8 of the Specification, *In one embodiment, the number of false SQL statements will be equivalent to the number of WHERE clauses*. The page 11, Lines 8-13 of the Specification further discloses: *For example, if a SQL statement has a WHERE clause, then one false WHERE clause is generated and used to replace the original WHERE clause and anything following it (e.g., a GROUP BY clause). If a SQL statement has two WHERE clauses, then one false WHERE clause is generated and used to replace both of the WHERE clause and everything following them and a second false WHERE clause is generated and used to replace the second WHERE clause and everything following it*. The example as cited by applicant to argue with the 112 rejection also asserts *the number of false SQL statements will be equivalent to the number of WHERE clauses*. As seen, if two clauses are selected then two false clauses needed to modify the query, not only one false clause as claimed. Thus, the step *modifying the query to replace one or more selected clauses with a false clause* was not described in the specification, and the rejection under 35 USC § 112 is still maintained.

Applicant's arguments, pages 10-11, with respect to Utility Rejection have been fully considered and are persuasive. The Claim Rejections - 35 USC § 101 of claims 1, 12 and 23 has been withdrawn.

Applicant's arguments on pages 12-14, with respect to Obviousness Rejection have been fully considered but they are not persuasive.

As argued by applicant:

> As an initial matter, Applicant notes that the subject matter discussed in pages 1-2 of the instant Application is described as "related art." There is no admission that any of the subject matter therein is "Prior Art." However, even if the subject matter from pages 1 and 2 is deemed to be prior art, it does not render the claims obvious.

Examiner respectfully traverses because of the following reasons:

Pages 1-2 are described as Related Art. However, as illustrated by applicant, *on the other hand, some systems do not provide such techniques for obtaining the types of a result set. The DB2 Version 5 of the OS/390 platform, on the other hand, does not have a DESCRIBE command. However, a developer can alter the Data Manipulation Language (DML) statement so that it returns no data, but allows full access to the metadata similar to that provided in the above DESCRIBE command.* Thus, the illustrated technique is prior art technique.

Data Manipulation Language is a means to manipulate a database. Typical manipulations include retrieval, insertion, deletion and modification of the data. Select statement is a DML statement for retrieving information from the database in the form of:

SELECT   <attribute list>

FROM   <table list>

WHERE   <condition>

<condition> is a Boolean (TRUE, FALSE) expression that identifies the tuples to be retrieved by the query. In order to <u>alter the DML statement to return no data</u>, or no tuples to be retrieved by the query, obviously, the query is executed with the WHERE clause modified to be FALSE. In other word, the technique as discussed performs the claimed *modifying the query to replace one or more selected clauses with a false clause; executing the modified query with the false clause.* The developer right now <u>has full access to the metadata to obtain the type of a result set</u>. Applicant Admitted Prior Art further discloses SQLJ enables developers to user Java data types as data types in SQL, and SQLJ iterator describes columns for a result set using Java types (Description of Related Art, pages 1-2). As seen, with <u>full access to the metadata to obtain the type of a result set,</u> SQLJ as a means to *retrieve* the type as *metadata from the result set obtained by executing the modified query.*

As argued by applicant:

> *Nevertheless, the Examiner alleges that one of ordinary skill "would know SQLJ allows SQL statements to be embedded in a Java program, and a false clause when added to a set of SQL statements will return no data." Thus, the Examiner alleges that it "would have been obvious ... to modify [AAPA] by using a false clause to replace one or more selected clauses in order to return no data from an embedded SQL query in a SQLJ program."*
> *In contrast, Applicants respectfully submit that one of skill would not have been motivated to modify AAPA as the Examiner has alleged. Specifically, it has long been held that the Examiner must "show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for a combination in the manner claimed." In re Rouffet, 47 USPQ2d 1453 (Fed.Cir. 1998). The mere fact that references can be "combined or modified does not render the resultant combination [or modification] obvious unless the prior art also suggests the desirability of the combination [or modification]." In re Mills, 916 F.2d 680 (Fed.Cir. 1990); MPEP § 2143 .01.*
> *Here, each of the disclosed AAPA methods of returning metadata, including the formulated DML statement cited by the Examiner, actually return metadata without the use of a "false clause." Thus,*

> *there would have been no motivation to modify these systems to*
> *provide a function that they already perform.*

In response to applicant's argument that there is no suggestion or motivation to modify the system, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, as disclosed by Applicant Admitted Prior Art, *a developer can alter the Data Manipulation Language (DML) statement so that it returns no data, but allows full access to the metadata.* WHERE <condition> is a Boolean (TRUE, FALSE) expression that identifies the tuples to be retrieved by the query. In order to <u>alter the DML statement to return no data</u>, or no tuples to be retrieved by the query, obviously, the query is executed with the WHERE clause modified to be FALSE.

As argued by applicant:

> *It seems that the Examiner is basing his entire obviousness argument*
> *on Applicant's description of the invention. Of course, this is*
> *improper, as the Examiner is utilizing knowledge gleaned from*
> *Applicant's disclosure, which is impermissible hindsight. In re*
> *McLaughlin 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971).*

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon

hindsight reasoning. But so long as it takes into account only knowledge which was

within the level of ordinary skill at the time the claimed invention was made, and does

not include knowledge gleaned only from the applicant's disclosure, such a

reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA

1971).

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of
making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 6, 12, 17, 23 and 28 are rejected under 35 U.S.C. 112, first paragraph,

as failing to comply with the written description requirement. The claim(s) contains

subject matter, which was not described in the specification in such a way as to

reasonably convey to one skilled in the relevant art that the inventor(s), at the time the

application was filed, had possession of the claimed invention. As in claims 1, the step

of *modifying the query to replace one or more selected clauses with a false clause* was not

described in the specification (as disclosed in specification, pages 11 and 12-13, two

false clauses were generated for a SQL statements has two WHERE clauses).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5, 8-16, 19-27 and 30-33 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Applicant Admitted Prior Art [Description of Related Art,

pages 1-2].

Regarding to claims 1, 12 and 23, Applicant Admitted Prior Art teaches *some*

databases have DESCRIBE command to list column names and data types of a query result. If the system

does not have the DESCRIBE command, a developer can alter the DML statement to return no data but

allow full access to the metadata to obtain the type of a result set (Description of Related Art,

pages 1-2). Data Manipulation Language is a means to manipulate a database. Typical

manipulations include retrieval, insertion, deletion and modification of the data. Select

statement is a DML statement for retrieving information from the database in the form

of:

SELECT <attribute list>

FROM   <table list>

WHERE   <condition>

<condition> is a Boolean (TRUE, FALSE) expression that identifies the tuples to

be retrieved by the query. In order to alter the DML statement to return no data, or no

tuples to be retrieved by the query, obviously, the select statement must be executed

with the WHERE clause modified to be FALSE. In other word, the technique as

discussed performs the claimed *modifying the query to replace one or more selected clauses*

with a false clause; executing the modified query with the false clause. The developer right

now <u>has full access to the metadata to obtain the type of a result set</u>. Applicant

Admitted Prior Art further discloses SQLJ enables developers to user Java data types

as data types in SQL, and SQLJ iterator describes columns for a result set using Java

types (Description of Related Art, pages 1-2). As seen, with <u>full access to the metadata</u>

<u>to obtain the type of a result set,</u> SQLJ as a means to *retrieve* the type as *metadata from*

the result set obtained by executing the modified query. Therefore, it would have been

obvious for one of ordinary skill in the art at the time the invention was made to modify

the Applicant Admitted Prior Art by using a false clause to replace one or more selected

clauses in order to return no data from an embedded SQL query in a SQLJ program.

Regarding to claims 2, 13 and 24, Applicant Admitted Prior Art teaches all the

claimed subject matters as discussed in claims 1, 12 and 23, but does not explicitly

teach *the query comprises a SELECT statement*. However, a SQL query is in the form

SELECT, FROM, WHERE. Therefore, it would have been obvious for one of ordinary

skill in the art at the time the invention was made to modify the Applicant Admitted Prior

Art by including a SELECT statement in order to execute a SQL query.

Regarding to claims 3, 14 and 25, Applicant Admitted Prior Art teaches all the

claimed subject matters as discussed in claims 2, 13 and 24, but does not explicitly

teach *the SELECT statement is not a SELECT INTO statement*. However, a SELECT is for

SQL query, and a SELECT INTO is for SQLJ. Therefore, it would have been obvious for

one of ordinary skill in the art at the time the invention was made to modify the Applicant

Admitted Prior Art by using a SELECT statement in order to distinguish a SQL query

and SQLJ query.

Regarding to claims 4, 15 and 26, Applicant Admitted Prior Art teaches all the

claimed subject matters as discussed in claims 1, 12 and 23, but does not explicitly

teach *the selected clauses comprises WHERE clauses*. However, However, a SQL query is

in the form SELECT, FROM, WHERE. Therefore, it would have been obvious for one of

ordinary skill in the art at the time the invention was made to modify the Applicant

Admitted Prior Art by using WHERE clause as selected clause to be replaced by false

clause in order to return no data.

Regarding to claims 5, 16 and 27, Applicant Admitted Prior Art teaches all the

claimed subject matters as discussed in claims 1, 12 and 23, but does not explicitly

teach *the selected clauses comprise GROUP BY clauses*. However, However, a SQL query

is either in the form SELECT, FROM, WHERE or SELECT, FROM, GROUP BY.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the

invention was made to modify the Applicant Admitted Prior Art by using GROUP BY

clause as selected clause to be replaced by false clause in order to return no data.

Regarding to claims 8, 19 and 30, Applicant Admitted Prior Art teaches all the

claimed subject matters as discussed in claims 1, 12 and 23, Applicant Admitted Prior

Art further discloses *the metadata comprises column type data for the result set* (Description

of Related Art, pages 1-2).

Regarding to claims 9, 20 and 31, Applicant Admitted Prior Art teaches all the

claimed subject matters as discussed in claims 8, 19 and 30, and further discloses the

step of *converting the column type data to JAVA types* (Description of Related Art, pages

1-2).

Regarding to claims 10, 21 and 32, Applicant Admitted Prior Art teaches all the

claimed subject matters as discussed in claims 9, 20 and 31, and further discloses the

step of *generating a SQLJ iterator with parameters having the JAVA types* (Description of

Related Art, pages 1-2).

Regarding to claims 11, 22 and 33, Applicant Admitted Prior Art teaches all the

claimed subject matters as discussed in claims 1, 12 and 23, but fails to disclose the

step of *determining the query requires a SQLJ iterator*. However, if the system does not

have the DESCRIBE command, a developer can alter the DML statement to return no

data but allow full access to the metadata to obtain the type of a result set SQLJ

enables developers to user Java data types as data types in SQL, and SQLJ iterator

describes columns for a result set using Java types (Description of Related Art, pages

1-2). Therefore, it would have been obvious for one of ordinary skill in the art at the time

the invention was made to modify the Applicant Admitted Prior Art by including the step

of determining the requirement of SQLJ iterator in order to use the method in different

platforms.

Allowable Subject Matter

4.   Claims 6-7, 17-18 and 28-29 are objected to as being dependent upon a

rejected base claim, but would be allowable if rewritten in independent form including all

of the limitations of the base claim and any intervening claims.

Regarding to claims 6-7, 17-18 and 28-29, Applicant Admitted Prior Art does not

suggest or teach the steps of *generating a list of modified queries; and executing each*

modified query until one executes successfully.

Conclusion

5.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of

time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within
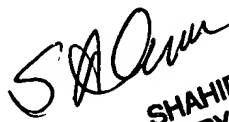
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q PHAM whose telephone number is 703-605-4242. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner Hung Pham
March 15, 2004

SHAHID ALAM
PRIMARY EXAMINER